THE BRITISH JOURNAL FOR THE PHILOSOPHY OF SCIENCE

VOLUME 48

1997

Published for the
British Society for the Philosophy of Science
by Oxford University Press

CONTENTS

ARTICLES

Page

1 WAVES, PARTICLES, AND EXPLANATORY COHERENCE
Chris Eliasmith and Paul Thagard

21 AKAIKE INFORMATION CRITERION, CURVE-FITTING, AND THE PHILOSOPHICAL PROBLEM OF SIMPLICITY
I. A. Kieseppä

49 CLASSICAL PARTICLE DYNAMICS, INDETERMINISM AND A SUPERTASK
Jon Pérez Laraudogoitia

55 PUTNAM ON REFERENCE AND CONSTRUCTIBLE SETS
Michael Levin

69 BIOLOGICAL FUNCTION, SELECTION, AND REDUCTION
Richard N. Manning

161 PROOFS AND PICTURES
James Robert Brown

181 VARIATION AND THE ACCURACY OF PREDICTIONS
Michael Kruse

195 BRUNO DE FINETTI AND THE LOGIC OF CONDITIONAL EVENTS
Peter Milne

233 MAKING THE CHANGE: THE FUNCTIONALIST'S WAY
Paul Noordhof

251 LAUDAN AND LEPLIN ON EMPIRICAL EQUIVALENCE
Samir Okasha

257 PAST, PRESENT, FUTURE, AND SPECIAL RELATIVITY
Nataša Rakić

313 QUANTUM MECHANICS, ORTHOGONALITY, AND COUNTING
Peter J. Lewis

329 QUANTITATIVE PARSIMONY
Daniel Nolan

345 JUNK REPRESENTATIONS
Lawrence A. Shapiro

363 BANANAS ENOUGH FOR TIME TRAVEL?
Nicholas J. J. Smith

465 DETERMINISM AND MODALITY
Carolyn Brighouse

483 GALILEO'S SHIP AND SPACETIME SYMMETRY
Tim Budden

517 LOGIC AND PROBABILITY
Colin Howson

533 CONDITIONALIZATION, COGENCY AND COGNITIVE VALUE
Graham Oddie

DISCUSSIONS

83 ON CHIHARA'S 'THE HOWSON–URBACH PROOFS OF BAYESIAN PRINCIPLES'
Colin Howson
391 A GRUESOME PROBLEM FOR THE CURVE-FITTING SOLUTION
Scott De Vito
397 WHAT ARE THE ADVANTAGES OF HYPERPROOF-LIKE REASONING SYSTEMS?
Martin Frické
543 IN SEARCH OF THE PHILOSOPHER'S STONE: REMARKS ON HUMPHREYS AND FREEDMAN'S CRITIQUE OF CASUAL DISCOVERY
Kevin B. Korb and Chris S. Wallace
555 REPLY TO HUMPHREYS AND FREEDMAN'S REVIEW OF *CAUSATION, PREDICTION AND SEARCH*
Peter Spirtes, Clark Glymour and Richard Scheines
569 CHANGING THE THEORY OF THEORY CHANGE: REPLY TO MY CRITICS
Neil Tennant

REVIEW ARTICLES

91 CONSCIOUSNESS DISPUTED
Janet Levin
411 MELLOR ON CHANCE AND CAUSATION
Dorothy Edgington
587 UNIVERSAL BIOLOGY
Kim Sterelny

REVIEWS

109 JED Z. BUCHWALD THE CREATION OF SCIENTIFIC EFFECTS
Robin Findlay Hendry
113 PETER DEAR DISCIPLINE AND EXPERIENCE: THE MATHEMATICAL WAY IN THE SCIENTIFIC REVOLUTION
Marjorie Grene
117 MAURO DORATO TIME AND REALITY: SPACETIME PHYSICS AND THE OBJECTIVITY OF TEMPORAL BECOMING
Craig Callender
121 C. A. HOOKER REASON, REGULATION, AND REALISM: TOWARDS A REGULATORY SYSTEMS THEORY OF REASON AND EVOLUTIONARY EPISTEMOLOGY
Harvey Siegel
126 COLIN HOWSON AND PETER URBACH SCIENTIFIC REASONING: THE BAYESIAN APPROACH, 2ND EDITION
Barry Gower
132 C. W. KILMISTER EDDINGTON'S SEARCH FOR A FUNDAMENTAL THEORY: A KEY TO THE UNIVERSE
Elie Zahar
140 C. J. MISAK VERIFICATIONISM: ITS HISTORY AND PROSPECTS
Colin Cheyne

143 BARRY MAUND COLOURS: THEIR NATURE AND REPRESENTATION
Jonathan Westphal
151 ROBERT A. WILSON CARTESIAN PSYCHOLOGY AND PHYSICAL MINDS: INDIVIDUALISM AND THE SCIENCES OF MIND
Gabriel Segal
281 BABETTE E. BABICH, DEBRA B. BERGOFFEN, AND SIMON V. GLYNN CONTINENTAL AND POSTMODERN PERSPECTIVES IN THE PHILOSOPHY OF SCIENCE
Andrew Belsey
284 CRAIG DILWORTH THE METAPHYSICS OF SCIENCE
Alexander Bird
287 STEVEN F. SAVITT TIME'S ARROW'S TODAY: RECENT PHYSICAL AND PHILOSOPHICAL WORK ON THE DIRECTION OF TIME
John Collier
290 SUN-JOO SHIN THE LOGICAL STATUS OF DIAGRAMS
Giovanna Corsi
292 ROBERT BRANDON CONCEPTS AND METHODS IN EVOLUTIONARY BIOLOGY
John Dupré
297 JAMES W. MCALLISTER BEAUTY AND REVOLUTION IN SCIENCE
Katherine Hawley
300 FRANK PLUMPTON RAMSEY NOTES ON PHILOSOPHY, PROBABILITY AND MATHEMATICS
E. J. Lowe
302 STEPHEN GAUKROGER DESCARTES: AN INTELLECTUAL BIOGRAPHY
J. R. Milton
306 NANCY CARTWRIGHT, JORDI CAT, LOLA FLECK, AND THOMAS E. UEBEL OTTO NEURATH: PHILOSOPHY BETWEEN SCIENCE AND POLITICS
THOMAS E. UEBEL OVERCOMING LOGICAL POSITIVISM FROM WITHIN
Thomas Mormann
310 STEPHEN R. L. CLARK HOW TO LIVE FOREVER: SCIENCE FICTION AND PHILOSOPHY
Adam Morton
435 DANIEL C. DENNETT DARWIN'S DANGEROUS IDEA: EVOLUTION AND THE MEANINGS OF LIFE
Jon Hodge
439 MARTIN KUSCH PSYCHOLOGISM: A CASE STUDY IN THE SOCIOLOGY OF PHILOSOPHICAL KNOWLEDGE
Peter Simons
444 HENRY KRIPS, J. E. MCGUIRE, AND TREVOR MELIA SCIENCE, REASON, AND RHETORIC
Alan Chalmers
447 LARRY LAUDAN BEYOND POSITIVISM AND RELATIVISM: THEORY, METHOD, AND EVIDENCE
André Kukla
455 DEBORAH MAYO ERROR AND THE GROWTH OF EXPERIMENTAL KNOWLEDGE
Hasok Chang
603 MICHAEL DEVITT COMING TO OUR SENSES
Nenad Miscevic
606 PIERRE DUHEM ESSAYS IN THE HISTORY AND PHILOSOPHY OF SCIENCE
Ernan McMullin

610 DONALD GILLIES (ED.) ARTIFICIAL INTELLIGENCE AND SCIENTIFIC METHOD
ROBERT CUMMINS AND JOHN POLLOCK (EDS) PHILOSOPHY AND AI: ESSAYS AT THE INTERFACE
John Preston

613 PETER GODFREY-SMITH COMPLEXITY AND THE FUNCTION OF MIND IN NATURE
Denis Walsh

618 EVELYN FOX KELLER AND HELEN E. LONGINO (EDS) FEMINISM AND SCIENCE
Miranda Fricker

621 HUGH LAFOLLETTE AND NIALL SHANKS BRUTE SCIENCE: DILEMMAS OF ANIMAL EXPERIMENTATION
Mark Parascandola

625 FRIEDEL WEINERT (ED.) LAWS OF NATURE: ESSAYS ON THE PHILOSOPHICAL, SCIENTIFIC AND HISTORICAL DIMENSIONS
John W. Carroll